

**EPA Superfund  
Record of Decision:**

**HERCULES 009 LANDFILL  
EPA ID: GAD980556906  
OU 02  
BRUNSWICK, GA  
06/27/1991**

	\$	0
ANNUAL OPERATION AND MAINTENANCE COSTS (O&M):	\$	23,000
MONTHS TO IMPLEMENT		0

## ALTERNATIVE 2

EXTENDING MUNICIPAL WATER LINES - IN ORDER TO MINIMIZE EXPOSURE TO CONTAMINATED GROUNDWATER, MUNICIPAL WATER LINES FROM THE BRUNSWICK WATER SYSTEM WOULD BE EXTENDED ALONG BENEDICT ROAD AND NIX LANE. WITH THE OWNER'S PERMISSION, ALL THE RESIDENCES AND THE BEVERLY SHORES BAPTIST CHURCH WOULD BE CONNECTED TO THE MUNICIPAL WATER SYSTEM. UNDER THIS ALTERNATIVE, PRIVATE WELLS IMMEDIATELY DOWNGRADIENT OF THE LANDFILL WOULD BE REPLACED BY THE MUNICIPAL WATER SYSTEM. THIS ACTION WOULD BE TAKEN IN COOPERATION WITH THE CITY OF BRUNSWICK WATER AND WASTEWATER DEPARTMENT. INSTITUTIONAL CONTROLS WILL BE IMPLEMENTED TO PREVENT THE CONSUMPTION OF CONTAMINATED GROUNDWATER. EXTENSION OF THE CITY'S WATER SUPPLY TO THE IMPACTED AREA WOULD ACHIEVE SIGNIFICANT RISK REDUCTION EARLY IN THE SUPERFUND PROCESS.

CONSTRUCTION COST:	\$	106,000
ANNUAL OPERATION AND MAINTENANCE COSTS (O&M):	\$	0
MONTHS TO IMPLEMENT		6

## #SCAA

### 8.0 SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES

THE PROPOSED INTERIM ACTION FOR THE SITE IS TO EXTEND MUNICIPAL WATER LINES ALONG BENEDICT ROAD AND NIX LANE. AS DISCUSSED EARLIER, THE INTERIM ACTION FOR THE GROUNDWATER IS BEING PROPOSED TO PREVENT THE CONSUMPTION OF CONTAMINATED GROUNDWATER. SUBSEQUENT ACTIONS ARE PLANNED TO ADDRESS FULLY THE PRINCIPAL THREATS POSED BY THE CONDITIONS AT THE SITE. THE "NO ACTION" ALTERNATIVE WOULD NOT ELIMINATE ANY EXPOSURE PATHWAYS OR REDUCE THE LEVEL OF RISK; HOWEVER, THIS ALTERNATIVE IS CARRIED THROUGH THE COMPARATIVE ANALYSIS AS A BASELINE FOR COMPARISON WITH THE REMAINING ALTERNATIVE.

THE EVALUATION OF THE PROPOSED INTERIM ACTION IS BASED ON THE LIMITED ROLE AND SCOPE OF THIS ACTION. THE EVALUATION PROFILES THE PERFORMANCE OF THE INTERIM ACTION WITH RESPECT TO THE NINE CRITERIA THAT EPA USES TO EVALUATE ALTERNATIVES. THE EVALUATION CRITERIA ARE NOTED BELOW.

#### EVALUATION CRITERIA

OVERALL PROTECTION OF HUMAN HEALTH AND ENVIRONMENT - ADDRESSES WHETHER OR NOT A REMEDY PROVIDES ADEQUATE PROTECTION AND DESCRIBES HOW RISKS POSED THROUGH EACH PATHWAY ARE ELIMINATED, REDUCED, OR CONTROLLED THROUGH TREATMENT ENGINEERING CONTROLS OR INSTITUTIONAL CONTROLS.

COMPLIANCE WITH ARARS - ADDRESSES WHETHER OR NOT A REMEDY WILL MEET ALL OF THE APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS) OF OTHER FEDERAL AND STATE ENVIRONMENTAL STATUTES AND/OR PROVIDE GROUNDS FOR INVOKING A WAIVER.

LONG-TERM EFFECTIVENESS AND PERMANENCE - REFERS TO THE MAGNITUDE OF RESIDUAL RISK AND THE ABILITY OF A REMEDY TO MAINTAIN RELIABLE PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT OVER TIME ONCE CLEANUP GOALS HAVE BEEN MET.

REDUCTION OF TOXICITY, MOBILITY, OR VOLUME THROUGH TREATMENT - IS THE ANTICIPATED PERFORMANCE OF THE TREATMENT TECHNOLOGIES THAT MAY BE EMPLOYED IN A REMEDY.

SHORT-TERM EFFECTIVENESS - REFERS TO THE SPEED WITH WHICH THE REMEDY ACHIEVES PROTECTION, AS

WELL AS THE REMEDY'S POTENTIAL TO CREATE ADVERSE IMPACTS ON HUMAN HEALTH AND THE ENVIRONMENT THAT MAY RESULT DURING THE CONSTRUCTION AND IMPLEMENTATION PERIOD.

IMPLEMENTABILITY - IS THE TECHNICAL AND ADMINISTRATIVE FEASIBILITY OF A REMEDY, INCLUDING THE AVAILABILITY OF MATERIALS AND SERVICES NEEDED TO IMPLEMENT THE CHOSEN SOLUTION.

COST - INCLUDES CAPITAL AS WELL AS OPERATION AND MAINTENANCE COSTS.

STATE ACCEPTANCE - INDICATES WHETHER, BASED ON ITS REVIEW OF THE RI/FS AND PROPOSED PLAN, THE STATE CONCURS WITH, OPPOSES, OR HAS NO COMMENT ON THE PREFERRED ALTERNATIVE.

COMMUNITY ACCEPTANCE - WILL BE ASSESSED IN THE RECORD OF DECISION FOLLOWING A REVIEW OF THE PUBLIC COMMENTS RECEIVED ON THE RI/FS REPORT AND THE PROPOSED PLAN.

## ANALYSIS

OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT THE "NO ACTION" ALTERNATIVE IS NOT PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT BECAUSE IT ALLOWS THE CONTINUED CONSUMPTION OF THE CONTAMINATED GROUNDWATER. THE "NO ACTION" ALTERNATIVE ALSO DEFEATS THE PURPOSE FOR CONDUCTING THIS INTERIM ACTION. THE PROPOSED MUNICIPAL WATER HOOK-UP WILL PROVIDE PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT BY ELIMINATING OR REDUCING THE RISK THROUGH PREVENTING THE CONSUMPTION OF CONTAMINATED GROUNDWATER.

COMPLIANCE WITH ARARS - CERCLA PROVIDES THAT IF AN INTERIM MEASURE IS CONDUCTED, ARARS CAN BE WAIVED; HOWEVER, ANY ARARS DIRECTLY ASSOCIATED WITH THIS ACTION WILL BE MET.

LONG-TERM EFFECTIVENESS AND PERMANENCE - THE GOAL OF THIS INTERIM ACTION IS TO PREVENT THE CONSUMPTION OF CONTAMINATED GROUNDWATER. WITHIN THE SCOPE OF THIS INTERIM ACTION, THE PLACING OF THE NEARBY RESIDENTS ON A MUNICIPAL WATER SYSTEM WILL ACHIEVE A LONG TERM SOLUTION OF ALLEVIATING THE IMMEDIATE WATER QUALITY THREAT TO HUMAN HEALTH IN THE IMMEDIATE AREA OF THE SITE. HOWEVER, LONG-TERM EFFECTIVENESS AND PERMANENCE FOR A REMEDY FOR THE SOURCE OF THE CONTAMINATION WILL BE EVALUATED PRIOR TO IMPLEMENTING THE FINAL REMEDY FOR THE SITE WHEN THE RI/FS IS COMPLETED. THE "NO ACTION" ALTERNATIVE WILL NOT PROVIDE LONG-TERM EFFECTIVENESS AND PERMANENCE WITH RESPECT TO THE CONTAMINATED AQUIFER AT THIS SITE.

REDUCTION OF TOXICITY, MOBILITY, OR VOLUME OF THE CONTAMINANTS THROUGH TREATMENT - NEITHER OF THE ALTERNATIVES PROVIDE FOR A REDUCTION OF TOXICITY, MOBILITY OR VOLUME OF THE CONTAMINANTS THROUGH TREATMENT. SUCH A REDUCTION IS BEYOND THE SCOPE OF THIS INTERIM ACTION BUT WILL BE ADDRESSED BY THE FINAL REMEDIAL ACTION TO BE IMPLEMENTED.

SHORT-TERM EFFECTIVENESS - THE GOAL OF THIS INTERIM ACTION IS TO PREVENT THE CONSUMPTION OF CONTAMINATED GROUNDWATER. THE "NO ACTION" ALTERNATIVE DOES NOT PROVIDE ANY SHORT-TERM EFFECTIVENESS WITH RESPECT TO THE CONTAMINATED AQUIFER AT THIS SITE. HOWEVER, THE PLACING OF THE NEARBY RESIDENTS ON A MUNICIPAL WATER SYSTEM WILL ACHIEVE AN IMMEDIATE SOLUTION TO THE IMMEDIATE WATER QUALITY THREAT TO HUMAN HEALTH IN THE AREA OF THE SITE WITHIN THE SCOPE OF THIS INTERIM ACTION. THE SHORT-TERM EFFECTIVENESS OF THE REMEDY FOR THE SOURCE OF THE CONTAMINATION WILL BE EVALUATED PRIOR TO IMPLEMENTING THE FINAL REMEDY FOR THE SITE WHEN THE RI/FS IS COMPLETED.

IMPLEMENTABILITY - BOTH ALTERNATIVES ARE EASILY IMPLEMENTED FOR THE SITE. IMPLEMENTATION TIME IS EXPECTED TO BE APPROXIMATELY SIX MONTHS FROM THE DATE OF AN APPROVED DESIGN FOR THE INSTALLATION OF THE MUNICIPAL WATER HOOK-UPS.

COST - THE "NO ACTION" ALTERNATIVE WILL HAVE COSTS OF \$23,000 PER YEAR ASSOCIATED WITH IT. THIS

COST WILL BE NECESSARY TO SAMPLE AND ANALYZE THE EXISTING DRINKING WELLS LOCATED ALONG BENEDICT ROAD ON AN ANNUAL BASIS. THE ESTIMATED CONSTRUCTION COST FOR THE MUNICIPAL WATER HOOK-UPS IS \$106,000 TO DESIGN AND CONSTRUCT THE SYSTEM.

STATE ACCEPTANCE - THE STATE OF GEORGIA CONCURS WITH THE SELECTED REMEDY FOR THIS SITE.

COMMUNITY ACCEPTANCE - COMMUNITY ACCEPTANCE OF THE INTERIM ACTION OF THE SELECTED REMEDY HAS BEEN POSITIVE. A LOCAL ENVIRONMENTAL GROUP, THE GLYNN ENVIRONMENTAL COALITION, CONCURS WITH THE SELECTED REMEDY. THE RESIDENTS WHO LIVE ALONG BENEDICT ROAD AND NIX LANE LIKE THE SELECTED REMEDY, BUT HAVE EXPRESSED CONCERNS ABOUT WHO WILL HAVE TO PAY THE MONTHLY WATER BILLS ONCE THE MUNICIPAL WATER IS PROVIDED TO THEIR HOMES.

#### **#SLR**

#### **9.0 SELECTED REMEDY**

EPA PROPOSES THAT THE MUNICIPAL WATER LINES FROM THE BRUNSWICK WATER SYSTEM BE EXTENDED ALONG BENEDICT ROAD AND NIX LANE. WITH THE OWNER'S PERMISSION, ALL THE RESIDENCES AND THE BEVERLY SHORES BAPTIST CHURCH WOULD BE CONNECTED TO THE MUNICIPAL WATER SYSTEM. UNDER THIS ALTERNATIVE, PRIVATE WELLS IMMEDIATELY DOWNGRADIENT OF THE LANDFILL WOULD BE REPLACED BY THE MUNICIPAL WATER SYSTEM. IN SUMMARY, THE MUNICIPAL WATER HOOK-UPS WOULD ACHIEVE SUBSTANTIAL RISK REDUCTION AT A EARLY STAGE IN THE SUPERFUND PROCESS. THIS EARLY ACTION IS BEING TAKEN TO ABATE THE IMMEDIATE THREAT TO HUMAN HEALTH, AND IS BEING TAKEN IN RESPONSE TO A POTENTIAL PROBLEM THAT COULD WORSEN IF NOT ADDRESSED. THIS ACTION WILL BE TAKEN IN COOPERATION WITH THE CITY OF BRUNSWICK WATER AND WASTEWATER DEPARTMENT.

#### **#SD**

#### **10.0 STATUTORY DETERMINATIONS**

##### **PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT**

THIS INTERIM REMEDY IS PART OF AN OVERALL REMEDY FOR THE SITE WHICH WILL ULTIMATELY PROTECT HUMAN HEALTH AND THE ENVIRONMENT. THIS INTERIM REMEDY IS PROTECTIVE IN THE SHORT TERM IN THAT IT WILL PREVENT THE INGESTION OF CONTAMINATED GROUNDWATER FROM THE SITE UNTIL A PERMANENT REMEDY IS IN PLACE. THIS REMEDY IS INTERIM IN NATURE AND AS SUCH WILL NOT BE PROTECTIVE IN THE LONG TERM. ALTHOUGH THIS INTERIM REMEDY IS NOT PROTECTIVE IN AND OF ITSELF, IT WILL BE PART OF AN OVERALL REMEDY WHICH WILL ATTAIN THE STATUTORY REQUIREMENT FOR PROTECTIVENESS. IN ADDITION, A FIVE-YEAR REVIEW WILL BE CONDUCTED TO DETERMINE WHETHER THIS INTERIM ACTION IS SERVING THE PROTECTIVE PURPOSE FOR WHICH THE THIS REMEDY WAS INTENDED.

##### **ARARS**

CERCLA PROVIDES THAT IF AN INTERIM MEASURE IS CONDUCTED, ARARS CAN BE WAIVED, AND THESE REQUIREMENTS WILL BE ACHIEVED UPON COMPLETION OF THE PERMANENT REMEDY. ACCORDINGLY, FINAL CLEANUP LEVELS FOR SOIL AND GROUNDWATER DO NOT HAVE TO BE ACHIEVED FOR THIS INTERIM ACTION, BUT WILL BE ADDRESSED IN THE FINAL REMEDY. THIS INTERIM REMEDY WILL COMPLY WITH ALL FEDERAL AND STATE REQUIREMENTS WHICH ARE APPLICABLE OR RELEVANT AND APPROPRIATE TO ITS IMPLEMENTATION.

##### **PERMANENCE**

THE SELECTED INTERIM REMEDY DOES NOT REPRESENT A PERMANENT SOLUTION WITH RESPECT TO THE PRINCIPAL THREATS POSED BY THE SITE. HOWEVER, GIVEN THE INTERIM NATURE OF THIS ACTION AND THE FACT THAT FURTHER STUDIES ARE NEEDED BEFORE A PERMANENT REMEDY FOR THE SITE CAN BE SELECTED, THE STATUTORY PREFERENCE FOR USE OF PERMANENT SOLUTIONS AND ALTERNATIVE TREATMENT TECHNOLOGIES WILL BE ADDRESSED AT THE TIME OF SELECTION OF THE FINAL REMEDY FOR THE SITE.

#### TREATMENT

THE SELECTED INTERIM REMEDY DOES NOT UTILIZE TREATMENT AS A PRINCIPAL ELEMENT. GIVEN THE NATURE OF THIS INTERIM ACTION, THIS ALTERNATIVE USES TREATMENT TO THE MAXIMUM EXTENT PRACTICABLE.

#### COST EFFECTIVENESS

THE SELECTED REMEDY IS COST EFFECTIVE, AND IS THE MOST COST-EFFECTIVE WHEN COMPARED TO THE OTHER ALTERNATIVE WHICH WOULD NOT ADEQUATELY PROTECT HUMAN HEALTH AND THE ENVIRONMENT IN THE SHORT TERM BY PREVENTING CONTAMINANT INGESTION.

#### EXPLANATION OF SIGNIFICANT CHANGES

THERE HAVE BEEN NO SIGNIFICANT CHANGES IN THE SELECTED INTERIM REMEDY FROM THE PREFERRED INTERIM REMEDY DESCRIBED IN THE PROPOSED PLAN.